Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A microwave ~~Microwave~~ tube ~~(3)~~ for generation of an electromagnetic wave with frequency F, ~~characterised in that it comprises~~ the microwave tube comprising:

mechanical means for varying the frequency F wherein said mechanical means are composed of:

a set of rings ~~(A, B, C, D)~~ defining a periodic structure inside the tube; and

mechanical means ~~(4, 5, 2, G; 7, 8, 9, 10)~~ for displacing ~~the~~ said rings with respect to each other while maintaining a periodicity for the periodic structure during displacement of the rings.

2. (Currently Amended) The microwave ~~Microwave~~ tube ~~(3)~~ according to claim 1, wherein ~~characterised in that~~ the mechanical means for displacing the rings comprises:

a set of electrical contacts ~~(2)~~ between rings~~,~~;

at least one lead screw ~~(4),~~;

a set of nuts ~~(5)~~ installed on the lead screw~~,~~; and

a set of rods ~~(6)~~, each rod firmly connecting a nut to a ring, the tube ~~(3)~~ being provided with at least one slit ~~(G)~~ enabling the set of rods ~~(6)~~ to pass in the wall of the tube, the lead screw ~~(4)~~ comprising several sectors with different pitches capable of keeping intervals between the rings during rotation of the lead screw.

3. (Currently Amended) A microwave tube ~~(3)~~ according to claim 1~~, characterised in that~~ wherein the mechanical means for displacing the rings comprises:

a set of electrical contacts ~~(2)~~ between the rings~~,~~; and

one set of pins ~~(7)~~, each pin of said one set of pins respectively being firmly connected to a corresponding ring, the tube ~~(3)~~ being provided with at least one longitudinal slit ~~(9)~~ through which each one of the pins ~~(7)~~ can pass in the wall of the tube, a ring ~~(8)~~ external to the tube comprising a set of slits ~~(10)~~, each slit ~~(10)~~ in the outer ring ~~(8)~~ allowing the passage of a corresponding pin ~~(7)~~, ~~the slits~~ each slit in the set of slits having a different inclination for each corresponding ring so as to maintain a periodicity for the different rings during displacement of the rings.

4. (Currently Amended) A microwave tube according to claim 1, ~~characterised in that it~~ wherein the microwave tube is a progressive wave tube (PWT), a backward wave tube (BWO) ~~PWT, a BWO type tube~~, a klystron, a magnetron, a carcinotron, or a maser.

5. (Currently Amended) A microwave tube according to claim 1~~, characterised in that~~ wherein the periodic structure of the microwave tube is made of corrugated plate.

6. (Currently Amended) A microwave tube according to claim 1, ~~characterised in that it comprises~~ further comprising an insert with an adjustable length.